104.3 - Stoichiometry (powder form)

These SRMs are defined as primary, working, and secondary standards in accordance with recommendations of the Analytical Chemistry Section of the International Union of Pure and Applied Chemistry [Ref. Analyst 90, 251 (1965)]. These definitions are as follows:

Primary Standard:
a commercially available substance of purity 100 ± 0.02% (Purity 99.98 + %).
Working Standard:
a commercially available substance of purity 100 ± 0.05% (Purity 99. 95 + %).
Secondary Standard:
a substance of lower purity which can be standardized against a primary grade standard.

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit of Issue	Intended Use	Stoichiometeric Purity (mass fraction %)	Assay Values for: Potassium Chloride	Assay Values for: Potassium	Assay Values for: Chloride
17f	Sucrose Optical Rotation	60 g	Optical Rotation	99.303			
83d	Arsenic Trioxide (Reductometric)	60 g	Reductometric Standard	99.9926			
84L	Potassium Hydrogen Phthalate	60 g	Acidimetric Standard	99.9934			
136f	Potassium Dichromate, (Oxidimetric Standard)	60 g	Oxidimetric Standard	99.9954			
350b	Benzoic Acid (Acidimetric)	30 g	Acidimetric Standard	99.9978			
351a	Sodium Carbonate	50 g	Acidimetric Standard	99.970			
723d	Tris Acidimetric	50 g	Acidimetric Standard	99.924			
917c	D-Glucose (Dextrose)	50 g	Purity Optical Rotation	99.7			
973	Boric Acid (Acidimetric Standard)	100 g	Acidimetric Value	100.009			
999b	Potassium Chloride (Primary Chemical)	30 g			99.977	52.4379	47.5519
8040	Sodium Oxalate (Reductometric)	60 g	Reductometric Standard	99.951			

Values in parentheses are not certified and are given for information only.

* As current supplies are depleted, conductivity SRMs 3194 (10000 µS/cm), 3195 (100000 µS/cm) and 3196 (20000 µ µS/cm) are being replaced by molality-based NIST traceable primary reference materials derived from any issuance of SRM 999 Potassium Chloride at conductivity levels of 1409.33 µS/cm, 108621 µS/cm, and 12825.7 µS/cm, respectively. For further information see: Reference Link

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